

AMENDMENTS TO THE CLAIMS

Please amend the paragraph beginning at page 8, line 12, as follows:

--Figure 2A-2B shows design of the targeting construct used to disrupt nuclear hormone receptor genes. Figure 2A, which illustrates the target sequence of the target nuclear hormone receptor gene (SEQ ID NO:1) ~~for the targeting construct, and~~ shows the location and extent of the disrupted portion of the nuclear hormone receptor gene, as well as the nucleotide sequences flanking the Neo' insert in the targeting construct. Figure 2B shows the sequences identified as SEQ ID NO:3 and SEQ ID NO:4, which were used as the targeting arms (homologous sequences) in the nuclear hormone receptor targeting construct.--

AMENDMENTS TO THE CLAIMS

Claims 1-38 (Canceled)

39. (New) A transgenic mouse whose genome comprises a homozygous disruption in a mCAR gene, wherein as a result of the disruption, the transgenic mouse lacks production of functional protein encoded by said gene and exhibits, relative to a wild-type mouse, impaired coordination or balance, a spleen abnormality, a thymus abnormality or a lymph node abnormality.
40. (New) The transgenic mouse of claim 39, wherein the impaired coordination or balance comprises decreased performance in a rotarod test.
41. (New) The transgenic mouse of claim 39, wherein the spleen abnormality comprises decreased spleen size.
42. (New) The transgenic mouse of claim 39, wherein the spleen abnormality comprises reduced spleen weight.
43. (New) The transgenic mouse of claim 39, wherein the spleen abnormality comprises reduced spleen to body weight ratio.
44. (New) The transgenic mouse of claim 39, wherein the spleen abnormality comprises lymphoid depletion of the spleen.
45. (New) The transgenic mouse of claim 39, wherein the thymus abnormality comprises reduced thymus size.
46. (New) The transgenic mouse of claim 39, wherein the thymus abnormality comprises reduced thymus weight.
47. (New) The transgenic mouse of claim 39, wherein the thymus abnormality comprises reduced thymus to body weight ratio.
48. (New) The transgenic mouse of claim 39, wherein the thymus abnormality comprises lymphoid depletion in the thymus.
49. (New) The transgenic mouse of claim 39, wherein the lymph node abnormality comprises lymphoid depletion.
50. (New) The transgenic mouse of claim 39, wherein the lymph node abnormality comprises reduced lymph node size.

51. (New) A cell or tissue obtained from the transgenic mouse of claim 39.
52. (New) A method of identifying an agent that modulates a condition associated with a disruption in a mCAR gene, the method comprising:
 - (a) administering a putative agent to a transgenic mouse whose genome comprises a homozygous disruption in the mCAR gene, wherein the transgenic mouse exhibits, relative to a wild-type mouse, impaired coordination or balance, a spleen abnormality, a thymus abnormality or a lymph node abnormality as a result of the disruption; and
 - (b) determining whether the agent has an effect on the impaired coordination or balance, the spleen abnormality, the thymus abnormality or the lymph node abnormality.